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EXAMINER CHAWLA, JYOTI				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/821,003

Applicant(s)

RATHJEN, SUSANNE

Examiner

JYOTI CHAWLA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,9,11-15 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9,11-15 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's amendment to claims and specification of March 31, 2008 is entered. Claims 8, 15, 21-24 have been amended, claim 10 has been cancelled and claim 25 has been added. Claims 8, 11-15, 21-25 are pending and examined in the application.

Oath /Declaration

It is noted that application 10/637283, listed as pending has since been abandoned.

Claim Rejections - 35 USC § 112 (Second Paragraph)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejection of claims 8-12 and 21-24 under 35 U.S.C. 112, second paragraph, for recitation of the trademark/trade name "neotame", has been withdrawn in light of applicant's amendments of 3/31/2008.

Rejection of claims 15 and 21-24 for being indefinite for the recitation of abbreviations, i.e., "bowsc" and "bowf" has also been withdrawn in light of applicant's amendments of 3/31/2008.

Claims 8, 9, 11-15 and 21-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8-15 and 21-24 contain the term "binary" and also recites the open ended term "comprising". The term binary is not defined by the specification. Thus as recited it is not clear whether the high intensity sweetener as recited in steps ii) of claims 8, 21 and 25 include a binary sweetener of acesulfame K and N-[N-(3~3-dimethylbutyl)-L-aspartyl]-L-phenylalanine 1-methyl ester only or has some other high intensity sweeteners as well. For the purposes of expediting prosecution, any high intensity

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sweetener composition with two or more high intensity sweeteners would be considered as binary sweetener composition for the purpose of prior art com.

Claim 13, is still rejected as it contains the trademark and thus is rejected under 35 U.S.C. 112, second paragraph, for recitation of the trademark/trade name "neotame".

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(A) Claims 8-15 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon et al., in view of the combination of Calderas et al (US 6294214) and Ishida et al (US 6372279 B1).

Regarding claims 8, 21 and 25, Simon et al., hereinafter Simon teaches that the combination of simple sugars and high intensity sweeteners as reduced calorie sweetener combination wherein the calories of the sweeteners are reduced by 50-70% and equate the taste and flavor and feel of the sugared beverages or foods (pages 331 and 332). Simon also teaches a combination of acesulfame K and high fructose corn syrup (HFCS) was known to be added to foods, see entire document, especially Figures 10 and 11. The reference does not equate the taste to HFCS 55, as instantly claimed. HFCS 55 comprises of 55% fructose and is slightly sweeter than regular sucrose. Calderas et al, hereinafter Calderas teaches that it is conventional to use HFCS-42, HFCE-55, and HFCS-90 in combination with artificial or no caloric sweeteners such as acesulfame (see entire patent, especially column 8, lines 42-65). Ishida et al , hereinafter Ishida, teaches that the combination of N-[N-(3,3-dimethylbutyl)-L-.alpha.-aspartyl]-L-phenylalanine 1-methyl ester or (neotame) and acesulfame K work synergistically. Ishida also teaches that the combination of N-[N-(3,3-dimethylbutyl)-L-.alpha.-aspartyl]-L-phenylalanine 1-methyl ester or (neotame) and acesulfame K, where acesulfame K is 10-97% by weight of the mixture which includes

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applicant's recited proportion of at least 10:1 (Abstract). Ishida also teaches that the combination of neotame and acesulfame K can be added to food and beverages in a suitable amount, either replacing part or whole of the sweetening composition (Columns 3-4 and claim 11).

Thus the combination of carbohydrate sweeteners, such as, sucrose and HFCS 42 and with high intensity sweeteners, such as acesulfame K was known at the time of the invention (Simon and Calderas). Further, high intensity sweeteners have been known to be added in a combination to foods. To combine more than one high intensity sweeteners, such as , N-[N-(3,3-dimethylbutyl)-L-.alpha.-aspartyl]-L-phenylalanine 1-methyl ester or (neotame) and acesulfame K, in the ratio recited by the applicant was also known in the art at the time of the invention (Ishida). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Simon in view of Calderas and Ishida and include a combination of neotame and acesulfame K in the proportion as taught by Ishida because the two high intensity sweeteners work well together to provide a sweet taste without the undesirable flavor or after taste. One would have been further motivated to do so as the resulting sweetener would have 50-70% reduced calories as compared to sucrose and a similar taste profile. Regarding the sweetener combination having the taste profile of HFCS 55, the prior art teaches the combination of sweeteners as recited by the applicant, in the recited ratios of the applicant. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention that similar ingredients combined in similar proportions would be expected to result in a product having a similar characteristics, i.e., taste profile similar to that of HFCS 55, as is instantly claimed.

Further the applicant is reminded that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing

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that they are not." In re Spada, 911F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Regarding claims 9 and 12, the Ishida reference teaches that the combination of neotame and acesulfame K can be added in varying amounts to the sweetener composition and also to foods and beverages (Column 4). It is further noted that the claimed amounts, in the absence of a showing to the contrary, are deemed a matter of choice and at most optimization. It is conventional in the art to manipulate sweetener blends to obtain desired results.

Regarding claim 11, it is noted that the claimed amounts of sucrose and HFCS 42 are deemed a matter of choice and at most optimization. It is conventional in the art to manipulate sweetener blends to obtain desired results because the use and manipulation of sucrose (sugar) and HFCS in the sweetener art is conventional. Therefore, it would have been a matter of routine optimization experimentation for one of ordinary skill in the art at the time of the invention to modify the relative proportions of sucrose and HFCS in order to optimize cost, taste, flavor and texture of the sweetener.

Regarding claim 13, Ishida teaches combination high intensity sweetener where acesulfame K is 10-97% by weight of the sweetener mixture (Abstract) which includes applicant's recited proportion of at least 10:1 to 450:1. Ishida also teaches that the combination of neotame and acesulfame K can be added to food and beverages in a suitable amount, either replacing part or whole of the sweetening composition (Columns 3-4 and claim 11).

Regarding claims 14 and 15, Simon and Ishida teach that the amount of sweetener in a food composition can be varied based on the desired flavor, taste and food or beverage type. Further, it is conventional in the art to manipulate sweetener amounts to obtain desired results. Therefore, it would have been a matter of routine determination for one of ordinary skill in the art at the time of the invention to modify the relative proportions of sweetener in the food in order to optimize the taste, flavor and texture of the food or

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beverage and altering the amount of sweetener in a food or beverage would not impart patentable distinction to the claims, absent any clear and convincing evidence and/or arguments to the contrary.

Regarding claim 21, the limitations recited in the claim are the same as recited in claims 8 and 14, thus claim 21 is rejected for the same reasons as discussed above in the rejection of claims 8 and 14.

Regarding claim 22 and 23, the limitation recited in the claim are the same as recited in claims 9 and 12, thus claim 22 and 23 are rejected for the same reasons as discussed above in the rejection of claims 9 and 12.

Regarding claim 24, the limitation recited in the claim are the same as recited in claims 13, thus claim 24 is rejected for the same reasons as discussed above in the rejection of claims 13.

Regarding claim 25, the limitations recited in the claim are the same as recited in claims 8 and 14, thus claim 25 is rejected for the same reasons as discussed above in the rejection of claims 8 and 14.

Therefore, claims 8, 9, 11-15, 21-25 are unpatentable over Simon, in view of Calderas and Ishida.

Double Patenting

Terminal disclaimer filed by the applicant on March 31, 2008 has been entered and the nonstatutory double patenting rejection of the current application 10/821,003 as being unpatentable over copending applications 11/035,590 and 10/638,721 have been withdrawn.

Response to Arguments

Applicant's arguments filed March 31, 2008 have been fully considered but they are not persuasive.

Applicant's remarks regarding 112 (second paragraph) rejections have been considered and responded above in the office action.

In response to applicant's arguments against the references individually (Remarks, pages 10-11 for Simon, 12-13 for Calderas and Ishida pages 14-15), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Simon teaches combination of sweeteners and teach the combination of acesulfame K and high fructose corn syrup (HFCS) (see entire document, especially Figures 10 and 11). Calderas teaches the conventional use of HFCS- 42, HFCE-55, and HFCS-90 in combination with artificial or non-caloric or high intensity sweeteners such as acesulfame in a beverage, i.e. a food product, especially column 8, lines 42-65). Ishida teaches of a combination of acesulfame K and neotame works synergistically and also teaches the relative proportions of acesulfame K and neotame that fall within the recited range of the applicant for claims 13 and 24. Thus, the prior art clearly teaches the claimed components, i.e., HFCS 42, sucrose and acesulfame K and neotame as conventional in the art. It is conventional in the art to manipulate sweetener blends to

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obtain desired results having a specific taste profile. It is further noted that the claimed amounts, in the absence of a showing to the contrary, are deemed a matter of choice and at most optimization. It is conventional in the art to manipulate sweetener blends to obtain desired results. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to use the specifically claimed HFCS and sugar combination and modify Simon because the use and manipulation of HFCS in the sweetener art is conventional. Further, in the absence of a showing of unexpected results, the claimed components, i.e., carbohydrate sweeteners along with high intensity sweeteners are used for nothing more than their art-recognized function to obtain no more than expected results.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Further, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case it was known in the art to combine carbohydrate sweeteners like HFCS with sucrose and also with high intensity sweeteners like acesulfame-K (Simon and Calderas). It was also known that neotame and acesulfame K in the recited ratio were known to work synergistically with each other (Ishida). Therefore, to make a combination of two or more carbohydrate sweeteners, including sucrose and HFCS, with two or more high intensity sweeteners including acesulfame and neotame, in order to make a lower calorie sweetener which has the sweetening profile of HFCS would

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have been a matter of routine experimentation for one of ordinary skill in the art at the time of the invention, absent any clear and convincing arguments and evidence to the contrary.

Therefore, applicant's arguments filed March 31, 2008 have been fully considered but they are not persuasive and the amendments to claims 8, 15, 21-24 and the new claim 25 are not seen to influence the conclusion of unpatentability previously set forth.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jyoti Chawla
Examiner
Art Unit 1794

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794